

# United States Department of the Interior



#### **BUREAU OF LAND MANAGEMENT**

Ely Field Office HC 33 Box 33500 (702 No. Industrial Way) Ely, Nevada 89301-9408 http://www.nv.blm.gov/

> In Reply Refer To: 3160 (NV-043) NV-040-07-015 N75081

#### Dear Interested Party:

Enclosed is the Decision Record/Finding of No Significant Impact (DR/FONSI) for the Eagle Exploration, Inc, oil and gas drilling project Rio Blanco #3. The decision to authorize the proposed action is issued full force and effect. The supporting Environmental Assessment (EA NV-040-07-015) is available on the Ely Field Office website: http://www.blm.gov/nv/st/en/fo/ely\_field\_office/blm\_information/nepa.2.html.

Implementation of the proposed action will allow Eagle Exploration, Inc, to exercise its rights under the lease agreement to explore for reserves of oil and gas so as to meet the increasing energy needs of this Nation. Any impacts resulting from the proposed action will be minimized through the carefully planned proposed action developed in the APD, the standard State and Federal operating regulations for oil and gas exploration, and the conditions of approval.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR, Part 4. If an appeal is taken, your appeal must be filed with the Bureau of Land Management, Ely Field Office, HC33 Box 33500, Ely, Nevada, 89301, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 or 43 CFR 3000.4 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Copies of the notice of appeal and petition for a stay must also be submitted to the Interior Board of Land Appeals, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, VA 22203, and to the Office of the Solicitor, U.S. Department of the Interior, Suite 6201, Federal Bldg., 125 South State St., Salt Lake City, Utah, 84138, at the same time the original documents are filed with this office.

If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. A petition for a stay of a decision pending appeals shall show sufficient justification based on the following rules:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success of the merits,

- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

Thank you for your participation in this EA and your interest in public lands. If you have any questions, please contact Bill Wilson at (775) 289-1882.

Sincerely,

Jeffrey A. Weeks Assistant Field Manager Nonrenewable Resources

Enclosure:

DR/FONSI, Eagle Exploration, Inc,

#### **Decision Record and Finding of No Significant Impact**

#### For Eagle Exploration, Inc, Rio Blanco No. 3

Lease No. N75081 EA # NV-040-07-015

DECISION:

It is my decision to authorize the Eagle Exploration, Inc, oil and gas well located in Nye County and described in the proposed action of the Environmental Assessment (EA). I concur with my staff's assessment of the environmental impacts and authorize the proposed action subject to the standard stipulations that are a part of State and Federal operating regulations, the Egan Resource Management Plan and Oil and Gas Leasing Amendment, and the site-specific conditions of approval (COAs) as listed below:

#### **Conditions of Approval:**

- 1. As well as the following site specific conditions of approval listed below, surface operations will follow the *Surface Operating Standards and Guidelines for Oil and Gas Exploration*, the *Gold Book*, and the Conditions of Approval (COAs) contained in the *Egan Resource Management Plan*, *Oil and Gas Leasing Amendment and Record of Decision* (also found in Appendix 2 of the EA).
- 2. During pad construction, all available topsoil will be salvaged and stockpiled separately from any other material. The topsoil will be seeded immediately with the attached interim seed mix in order to stabilize the soil and help prevent the establishment of invasive and non-native weeds. An additional interim seeding may be required.
- 3. Final pad reclamation will consist of recontouring, ripping, re-spreading the topsoil, and reseeding with the attached final seed mixture. Seeding is recommended between October 1 and March 15. The performance goal for successful revegetation is that the reclaimed area will have 100% of the perennial canopy cover of the existing adjacent plant cover. The site will be evaluated by the Ely BLM for vegetative progress after at least one full growing season. If not successful, the BLM reclamation specialist will review the reclamation procedures with the operator to decide on the best course of action.
- 4. Access road construction will include salvaging the top 12" of topsoil, where available, in a windrow along the edge of the road and immediately seeding it with the same interim seed mixture as used for the pad. Final reclamation will be similar to that for the location pad: regrading, ripping the road surface, recovering

with the salvaged topsoil, and final seeding. All of the newly constructed road will be reclaimed, unless the water well is not plugged and abandoned. (See #11, below.)

- 5. Gravel used for pad or access road construction may be placed only after the underlying topsoil has been salvaged. It not removed prior to reclamation, it will be ripped so that is mixed with the underlying material prior to being covered with the stockpiled topsoil.
- 6. The operator will be responsible for complete control of any noxious weeds that become established within the project area during the life of this project through final reclamation. This would include the responsibility for control of noxious weeds along the access roads, pad location, and any gravel sources. Noxious and invasive weeds, which may be introduced due to soil disturbance and reclamation, will be treated by methods to be approved by the authorized officer. Bond release is contingent upon the absence of noxious weeds.
- 7. The operator will be responsible for taking steps to mitigate the spread or increased densities of noxious and invasive weeds that result from implementation of the proposed action. The operator will implement the Ely Field Office Noxious Weed Prevention Schedule and SOPs for weed treatments, with special emphasis on the following actions. Prior to entering the site, all construction, drilling equipment, and vehicles will be washed down and cleaned to prevent the importation of noxious weed seeds from prior places of work. Vehicles will stay on roads and avoid driving through any weed patches. All seeds used in reclamation will be certified weed-free. The operator will assist in monitoring for noxious and invasive weeds during the life of the project, until reclamation is complete.
- 8. Operations commencing during the period May 1 to July 15 will be subject to the provisions of the Ely District policy management actions for the conservation of migratory birds. A qualified wildlife biologist will survey the area for nesting migratory birds. If nesting birds are found, then appropriate mitigation measures will be developed.
- 9. An access permit will be obtained for the approach and access onto SR 318. For more information, contact the NDOT District III Office at (775) 289-1700.
- 10. An Oil & Gas exploration waiver must be obtained from the Nevada State Engineer's Office for drilling an on-site water supply well. A water well may be accepted by the Ely District or a permittee upon completion of operations. Please submit the following information to the Ely District Office, Bureau of Land Management, HC 33, Box 33500, Ely, NV 89301-9408:

Profile 1 Water Analysis
Water well drillers log that includes:

Type of inside diameter of casing used in well
Total depth of well
Depth of concrete seal
Depth of static water level
Water bearing formation or description of aquifer

- 11. Should the water well be left in use, a portion of the constructed access road, approximately 8' in width, and smallest practical portion of the pad will be left accessible following reclamation.
- 12. Should the oil well be put into production, as much of the well location and access road not needed for production will be immediately reclaimed using the final reclamation procedures and seed mix.

#### Monitoring:

The monitoring measures included in the proposed action are sufficient to ensure mitigation of the potential impacts. No additional monitoring measures are proposed.

#### Rationale:

Implementation of the proposed action will allow Eagle Exploration, Inc, to exercise its rights under the lease agreement to explore for additional reserves of oil and gas so as to meet the increasing energy needs of this Nation. Any impacts resulting from the proposed action will be minimized through the carefully planned proposed action developed in the APD, the standard State and Federal operating regulations for oil and gas exploration, and the site specific conditions of approval as listed above. As a result of the analysis for the proposed oil and gas well, it was determined that the Proposed Action will not result in unnecessary or undue degradation to the public lands. The proposed action is in conformance with Egan Resource Management Plan and is consistent with the Nye County Land Use Plan (May 1998).

#### FONSI:

Finding of No Significant Impact: I have reviewed Environmental Assessment (EA) NV-040-07-015, dated May 2, 2007. After consideration of the environmental impacts as described in the EA, and incorporated herein, I have determined that the proposed drilling activities, with the standard operating procedures as described in the EA will not significantly affect the quality of the human environment and that an Environmental Impact Statement (EIS) is not required to be prepared. This finding and conclusion is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 Code of Federal Regulations 1508.27), both with regard to the context and the intensity of impacts described in the EA.

#### Rationale:

I have determined the proposed action is in conformance with the approved Egan Resource Management Plan, the Egan Oil and Gas Leasing Amendment, and the Nye County Land Use Plan.

#### Intensity:

1) Impacts that may be both beneficial and adverse.

The environmental assessment has considered both beneficial and adverse impacts of the oil and gas drilling project. On the whole, the project will provide economic benefits to the local communities and perhaps the development of additional oil and gas reserves. Successful reclamation efforts will re-establish native vegetation to the 4.0 acres. Until vegetation is firmly reestablished, the project area will be increasingly susceptible for weed invasion.

2) The degree to which the proposed action affects public health or safety.

Implementation components of the proposed action will not result in potentially substantial or adverse impacts to public health and safety.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There are no unique cultural or environmental characteristics that would be disturbed in the geographic area. Public lands in this portion of White river valley are used for cattle and sheep grazing and wildlife.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The methods chosen to implement the drilling project and complete reclamation are accepted methods to meet resource and management objectives and are not considered highly controversial.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no effects of the proposed action identified in the EA which are considered uncertain or involve unknown risks. All reclamation actions proposed to be employed have been developed through the drilling of over 200 oil and gas wells in the Ely BLM District and are accepted standard practices.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The proposed action does not establish a precedent for future actions with significant effects and does not represent a decision in principle about a future consideration.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

No significant cumulative impacts have been identified in the EA. The number of wells drilled in the Eagan Resource Area is far less than that estimated in the

Eagan Resource Area Oil and Gas Amendment.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

No districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places were identified in the project area through the EA. The proposed action will not cause the loss or destruction of significant scientific, cultural or historical resources.

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

A field survey and review of existing records for this EA determined that no endangered or threatened species or their habitats are present in the project area.

10) Whether the action threatens a violation of Federal, State, or local law or requirement imposed for the protection of the environment.

The proposed action will not violate or threaten to violate any Federal, State, or local law or requirement imposed for the protection of the environment.

Jeffrey A. Weeks	Date	
Assistant Field Manager		
Nonrenewable Resources		

## **ENVIRONMENTAL ASSESSMENT**

NV-040-07-015

## APPLICATION FOR PERMIT TO DRILL

EAGLE EXPLORATION, INC,

LEASE NO. N75081

WELL

Rio Blanco No. 3

LOCATION: WHITE RIVER VALLEY

NYE COUNTY, NEVADA

PREPARED BY

BUREAU OF LAND MANAGEMENT ELY FIELD OFFICE

**AUTHOR** 

William R. Wilson

May 2007

#### I. BACKGROUND INFORMATION

#### Introduction

On December 15, 2006, the Ely Field Office of the Bureau of Land Management received a Notice of Staking from Eagle Exploration, Inc, for an oil well, Rio Blanco No. 3, on lease No. N75081, located in Section 18, T. 09 N., R. 62 E., MDBM. A pre-drill, onsite, inspection was held on February 16, 2007, to evaluate whether there were any cultural resources, wildlife, or other site specific resources that might be adversely affected at the proposed location. An Application for Permit to Drill (APD) was received at the Nevada State Office on March 6, 2007 (Attachment 1).

The proposed wildcat well is located in Nye County, Nevada, approximately 15 miles south of Lund (**Figure 1**), on the east side of White River valley. Eagle Exploration is currently drilling a well, Rio Blanco #2, about 3 miles north of Rio Blanco #3. Fourteen other wells, some with oil shows, have been drilled within 8 miles of Rio Blanco #3 since 1957.

#### **Need and Purpose for the Proposal**

The need is for a private corporation to seek an economic use of the public lands by drilling an exploratory well for oil and gas under appropriate Federal leases in the attempt to help meet the increasing demand for oil and gas in the United States.

Drilling operations within present leases cannot be cancelled by the denial of an APD. The Mineral Leasing Law of 1920, as amended, allows areas to be leased for oil and gas exploration and development. Leasing areas are developed through BLM's planning process. The lessee has the lease has a right to drill for oil and gas within that lease as well as access to the proposed well site by a road. The selected route has to be reasonable and cause no undue degradation to the environment.

The purpose of the Rio Blanco No. 3 well is to test for oil. Should a discovery be made, the well would be put into production with no additional ground disturbance. This NEPA analysis will evaluate both the exploration drilling and potential production of the Rio Blanco No. 3 location, if successful and desirable, subject to existing oil and gas regulations.

#### **Relationship to Planning**

The Proposed Action is in conformance with the <u>Proposed Egan Resource Management Plan (RMP)</u> and Final Environmental Impact Statement (FEIS), September 21, 1984, which states "the public lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is clearly justified in the national interest" (page 15). The <u>Egan Resource Management Plan; Oil and Gas Leasing Amendment and Record of Decision</u>, May 1994, specifically incorporates oil and gas leasing into the land use plan.

The Egan Resource Management Plan; Proposed Oil and Gas Leasing Amendment and Final

Figure 1. Location Map of Rio Blanco No. 3

Oil\_Well

3-29-07

Location Map Duckwater 1:100,000 Eagle Exploration, Inc. Hardy Springs 7.5" Quad RioBlanco #3 Nye County, Nevada RioBlanco #3; T09N R62E Sec18 Ely BLM DistrictText Water \* Rio Blanco #3 Well Location

NV-040-07-015

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for Individual or aggregate use with other data. EA NV-040-07-015

Lease # N 75081

<u>Supplemental Environmental Impact Statement</u>, August, 1993, analyzes impacts, including cumulative impacts, for actions such as the proposed action – wildcat oil and gas well drilling. That document is incorporated by reference into this environmental analysis. The document is available at the Ely Field Office, Bureau of Land Management in Ely, Nevada.

The Nye County Comprehensive Plan (April 5, 1994) does not specifically address oil and gas leasing. However, the proposed action is consistent with this Plan, which states (p.20) that "Nye County has a clear public interest in working with mining companies to accommodate cycles of growth and decline, and, where possible, reduce cost."

#### <u>Issues</u>

Noxious weeds and migratory birds were identified as issues to be addressed during internal scoping. Special status plants, particularly Cryptantha Welshii, and sensitive fish species are known to occur in White River Valley.

#### II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

#### **Proposed Action**

Eagle Exploration, Inc. proposes to drill a wildcat oil and gas well in T. 09 N., R. 62 E., section 18, approximately 15 miles south of Lund, Nye County, Nevada. Drilling operations would commence in the spring of 2007, depending on weather and rig availability, and are expected to be completed within approximately one month. If the hole is dry, it would be immediately plugged and abandoned. Reclamation would be completed in approximately three years.

Should the well be placed into production, operations would last for several years. Production operations are generally handled through Sundry Notices (standard forms to notify or approve well operations subsequent to an APD) and associated permitting, unless they involve additional disturbance for which additional NEPA analysis is required. Typical activities include development of the well, installation of pumping and storage facilities, hauling of the oil to a process facility – usually one to two tanker truckloads per month, possible well servicing, and routine maintenance. Best management practices as discussed in the Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (The Gold Book) give guidance in mitigating long-term impacts of oil and gas operations.

Site-specific actions were agreed upon during the January 11, on-site visit and are included in the proposed action and Record of Decision. Site specific conditions of approval for all oil and gas operations in the Egan Resource Area are included in **Attachment 2** of this EA.

The estimated disturbance for the proposed action consists of:

 $\begin{array}{ccc} \text{Road Construction} & 300 \text{ ft x 25 ft} & 0.2 \\ \underline{\text{Well pad area}} & 400 \text{ x 400 ft} & \underline{3.8} \\ \hline \text{Total} & 4.0 \text{ acres} \end{array}$ 

#### **Existing Roads and Access**

The well site can be reached from Ely, Nevada, by proceeding westward on US Highway 6 for approximately 25 miles and turning left (south) on SR 318 for an additional 27 miles. Turn off to the west and follow an existing graveled county road for 600 feet. Approximately 300 feet of new road as much as 25 feet wide would then be constructed southward to the well location (Figure 2). The new road would be flat bladed and surfaced with approximately 4 inches of gravel. The top 12 inches of topsoil would be salvaged in a windrow along the edge of the road and immediately seeded with the same interim seed mixture as used for the well pad as shown in Attachment 4.

Should the well go into production, the road would be upgraded to BLM standards, as shown in BLM Manual 9113. It would be maintained until final abandonment and reclamation are completed.

#### Well site Layout

The well site layout is shown in Figure 3. The Rio Blanco No. 3 would be constructed on moderately rolling terrain. The top 12 inches of topsoil would be stripped from the locations and stockpiled for future reclamation and immediately seeded with the interim seed mix shown in Attachment 4. The pad would be leveled, using material excavated from the reserve pit plus cuts and fills from the pad area itself, and then graveled.

The dirt contractor would be provided with an approved copy of the operations plan in accordance with 43 CFR 3164.

No permanent living facilities are proposed for the sites, but there would be trailers on location during drilling operations, which would serve as temporary offices and housing for the drilling supervisor and well site geologist.

The reserve pit would be designed to exclude surface runoff. It would be constructed entirely in cut material, and would be lined, either with bentonite or a 12 mil plastic liner, as determined upon examination of the underlying bedrock. The pit would be fenced and flagged on the three exposed sides during operations to prevent wildlife and livestock from falling into the pit. Once drilling operations are completed, the fourth side would be completed and remain fenced until grading and reseeding are completed. Recommended fencing diagrams, reproduced from the "Gold Book", are shown in Attachment 3.

#### **Water Source**

Water for construction and drilling operations would be obtained from a separate water well permitted through a waiver from the Nevada Division of Water Resources. This well would be drilled from a corner of the oil well drill pad to a depth of approximately 400 feet. Most of this water would be used in drilling the oil well, particularly while drilling through anticipated lost circulation zones. Eagle Exploration, Inc. estimates they would use a total of approximately 0.33 acre feet for the project.

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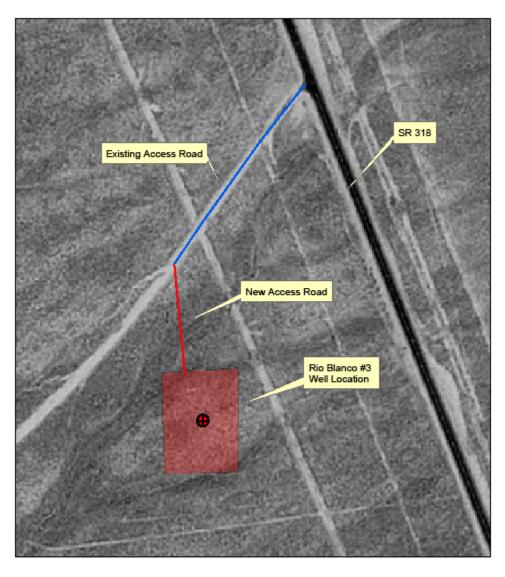
Figure 2. Site Map of Rio Blanco #3

Duckwater 1:100,000 Hardy Springs 7.5" Quad

RioBlanco #3; T09N R62E Sec18

Eagle Exploration, Inc. RioBlanco #3 Nye County, Nevada





EA NV-040-07-015

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0 50 100 200 300 400 Feet

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data.



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PAGE 03/11 08:40 7758616711 BLM MINERALS MGT [au] EWCO mud pump/parts house Well Logger Cernent Unit Ideco mud pump Fresh Mud sonk Light plant/Dng House Toolpusher/Co.man House Junk Box Rig/draw works Mud truk Fuel/Dog House 250 Riley Paige Oil Field Services, LLC
Rig 166
Drilling Rig and Equipment
Exhibit C Pipe tub Pipe tub Substructure

Figure 3 Well Site Layout

Once Rio Blanco No. 3 is completed, the water well would be plugged and abandoned in accordance with State Regulations unless the BLM or a private party applies for water rights and agrees to final abandonment responsibilities.

#### **Source of Construction Materials**

Gravel and surfacing material for the well location pad and access road would be obtained from construction of the well location. Should additional gravel be required, it would be obtained from an existing permitted source approximately 5 miles north of Rio Blanco #3.

#### **Waste Materials**

Drill cuttings and drilling fluids would be contained in the reserve pit. The reserve pit and drilling fluids contained in the pit would be allowed to dry before backfilling. Fluids would not be drained onto the surrounding surface.

Any spills of hydrocarbons from equipment on site would be promptly cleaned up and removed from the location in accordance with state and federal regulations.

All wastes that accumulate during the drilling operations would be contained in a trash cage or dumpster. Wastes would be removed periodically from the location and taken to an approved landfill. Burning would not be allowed on the well site. Chemical toilets with holding tanks would be utilized. All sewage would be disposed of in accordance with county, state, and federal regulations.

A Sundry Notice and Report on Wells (form 3160-5) would be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.

#### **Location of Existing and/or Proposed Facilities if the Well is Productive**

There are no existing production facilities within a one-mile radius of the proposed well. The nearest producing oil field is located in Railroad Valley, approximately 35 miles west of the proposed well.

If production was established at this location, a Sundry Notice showing the location of tank batteries and production facilities would be submitted prior to operations. Facilities would be placed on the well site pad so that no additional disturbance would be necessary. Any production pits would be fenced to prevent wildlife entry. Production would be expected to last for several years. Facilities would be painted with environmentally friendly colors and lighting would be selected to avoid distracting motorists on SR 318.

#### Reclamation

Reclamation would begin concurrently with well site construction activities. Topsoil would be stockpiled along the edge of the drill pad. The stockpiles would be seeded immediately and again, if needed, during the first recommended seeding period (October 1 to March 15) with the

interim seed mixture shown in Attachment 4. Available topsoil from the access road construction would be similarly stockpiled and seeded.

Well abandonment and plugging would follow the procedures of 43 CFR 3162.3-4. If the well is not put into production, the location and surrounding area would be cleaned of all material and debris. All excavations would be backfilled and compacted from bottom to top immediately upon completion of drilling operations. The reserve pit would be completely fenced off and flagged on all four sides to prevent access by wildlife, wild horses, and livestock. Any oil spills remaining in the reserve pit after drilling operations would be removed in accordance with state and federal regulations prior to allowing pit drying to take place.

Once the reserve pit is dry, which normally takes one to two years, dirt work would commence. The well pad and any other associated disturbed areas would be re-contoured to the approximate natural contours. Cuts and fills would be reduced to 3:1 slopes or less. Any gravel remaining on the pad would be ripped and mixed with the underlying material. Compacted soils within the disturbed areas would be broken up into a fine-grained seedbed by disking or any other generally accepted method of preparation. The stockpiled topsoil would be distributed over the re-contoured area. Seed from the recommended final seed mix (Attachment 5) would be planted on contour with a drill seeder or broadcast technique during the recommended seeding period of October 1 to March 15.

The 300 foot segment of newly constructed access route would be ripped, scarified, re-covered with the stockpiled topsoil, and seeded with the same seed mixture recommended for the well pad. Road reclamation would be done concurrently with the well site reclamation and follow the same procedures. Any gravel left on the roads would be ripped and mixed with the underlying material prior to re-covering the roads with topsoil and seeding.

If production is established, the reserve pit and areas not needed for production, approximately one acre, would be reclaimed. Final reclamation of the remaining two acres and the access road would be deferred until production is completed and the well is plugged and abandoned.

If the temporary water well is transferred to private or BLM ownership, then an 8' wide strip of the 300 foot access road and a small portion of the well pad, a total of approximately one acre, will be left unreclaimed in order to provide access to the water well.

Eagle Exploration, Inc, would be bonded as required under 43 CFR 3104.

#### **Monitoring**

Monitoring needed to assess reclamation success and continuing environmental stewardship would consist of periodic compliance inspections of the area during the life of the drilling operation by an authorized officer of the BLM. This monitoring would consist of checks on initial location of facilities, conformance to the APD and Conditions of Approval, and the status of any reclamation. Post-drilling compliance inspections would document, among other things, conformance with the proposed action, completion of earthworks of the reclamation plan, and monitoring for noxious weeds and vegetative success.

#### **The No Action Alternative**

The no action alternative, to not construct the oil and gas well pad and drill the wildcat well, is being analyzed in this EA in order to provide a baseline for comparison.

#### Other Alternatives Considered but not Analyzed in Detail

Access along an existing power line road just east of the well location was looked at but rejected due to cultural resource concerns.

#### **Other Alternatives**

No other alternatives are necessary to respond to unresolved conflicts concerning alternative uses of available resources.

# III. <u>DESCRIPTION OF THE AFFECTED ENVIRONMENT WITH THE ASSOCIATED ENVIRONMENTAL CONSEQUENCES</u>

#### **Resources Not Present or Not Affected by the Proposed Action**

There would be no impacts to; floodplains, wetlands and riparian areas; wilderness values; areas of critical environmental concern; wild and scenic rivers; prime or unique farmlands; cultural, paleontological and historical resource values; wildlife; wild horses and burros (the proposed action is not within an HMA); recreation; Native American religious concerns; or environmental justice.

The above resources are not known to occur in the project area or will be avoided.

A Class III cultural inventory was conducted by a BLM archeologist and staff over the proposed drill pad and access route on the February 16, 2007 pre-drill inspection. No cultural or paleontological resources were found on the selected route. Therefore it is determined that this undertaking will not have any effect on historic properties under VII (D) (1) of the State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada State Historic Preservation Officer.

Techniques used in this survey were such that most cultural and paleontological resources existing in the project area visible to surface examination should have been found. If however, cultural or paleontological resources are subsequently discovered that could be adversely affected by project-related activities the Ely District Manager will be immediately informed.

#### **Socio-Economic**

#### **Affected Environment**

Eastern Nye County is sparsely populated. Employment in White River Valley area is largely

based on agriculture in the communities Preston and Lund, recreation at the Kirch Wildlife Management Area, and oil production in Railroad Valley. Ely, Nevada is the closest town to the project area that offers supplies and services.

#### **Environmental Consequences**

#### **Proposed Action**

The proposed action would provide the local community with short-term employment opportunities over the duration of the drilling operation. Should the well be productive, a private corporation would make an economic use of the public lands and long-term employment opportunities would be available for a larger work force.

#### No Action Alternative

The local community would be deprived of this short term and potential future employment opportunity. This economic use of the public lands would not occur.

#### **Soils and Vegetation**

#### **Affected Environment**

**Figure 3** shows the gently sloping topography and vegetation of the project site. Precipitation averages 8" to 10" per year. The soils are a Palinor very gravelly loam formed on the fan pediment of the South Egan Range. A soil test hole dug during the onsite inspection showed approximately 12" of topsoil cover overlying a gravelly hardpan.

Vegetation is characterized by black sage, Indian ricegrass, and needleandthread plus minor amounts of sandberg bluegrass bottlebrush squirreltail, downy rabbitbrush and shad scale. Normal yearly production for this ecological site is about 450 lbs. per acre.

#### **Environmental Consequences**

#### **Proposed Action**

It would be difficult to completely reestablish native vegetation to the disturbed area because of the low amount of precipitation and prevalence of cheatgrass and other invasive weeds in this portion of White River Valley. (See Invasive, Non-Native Species (Including Noxious Weeds), below.) Productivity of the soil would be lessened due to loss of the soil structure during construction and reclamation activities. There would be an immediate loss of 4.0 acres of





existing vegetation for wildlife and grazing. Should the well be plugged and abandoned, the reclamation measures of the proposed action would, as much as possible, begin restoration of vegetation over the new disturbance within two to three years. Should the well be placed into production, approximately two acres would be unavailable for several additional years. Should the water well be put in use, approximately one acre will remain permanently unreclaimed.

#### No Action Alternative

Under the no action alternative, impacts as described above would not occur.

#### **Mitigation Measures**

During pad construction, all available topsoil would be salvaged and stockpiled separately from any other material. The topsoil would be seeded immediately with the attached interim seed mix in order to stabilize the soil and help prevent the establishment of invasive and non-native weeds. An additional interim seeding may be required.

Final pad reclamation would consist of recontouring, ripping, re-spreading the topsoil, and

reseeding with the attached final seed mixture. Seeding is recommended between October 1 and March 15. The performance goal for successful revegetation is that the reclaimed area would have 100% of the perennial canopy cover of the existing adjacent plant cover. The site would be evaluated by the Ely BLM for vegetative progress after at least one full growing season. If not successful, the BLM reclamation specialist would review the reclamation procedures with the operator to decide on the best course of action.

Access road construction would include salvaging the top 12" of topsoil, where available, in a windrow along the edge of the road and immediately seeding it with the same interim seed mixture as used for the pad. Final reclamation would be similar to that for the location pad: regrading, ripping the road surface, recovering with the salvaged topsoil, and final seeding. All of the newly constructed road would be reclaimed, unless the water well is not plugged and abandoned.

Gravel used for pad or access road construction would be placed only after the underlying topsoil has been salvaged. It not removed prior to reclamation, it will be ripped so that is mixed with the underlying material prior to being covered with the stockpiled topsoil

Should the oil well be put into production, as much of the well location and access road not needed for production would be immediately reclaimed using the final reclamation procedures and seed mix.

#### **Migratory Birds**

#### **Affected Environment**

Migratory birds occur throughout eastern Nevada. Based on a migratory bird survey conducted on April 30, 2007, the following species are reasonably certain to nest within the footprint of the Rio Blanco #3 location. Other species may use the area as foraging ground but require additional habitat characteristics for nesting (such as prairie falcon, common raven, ferruginous hawk etc.). Although sagebrush habitat at the site is intact, the site survey suggested nesting densities are moderate.

Species	Latin	BLM Sensitive Species
Sage Sparrow	Amphispiza belli	no
Sage Thrasher	Oreoscoptes montanus	no
Brewer's Sparrow	Spizella breweri	no
Black-throated Sparrow	Amphispiza bilineata	no
Horned Lark	Eremophila alpestris	no

#### **Environmental Consequences**

Proposed Action

Construction activities associated with building the access road and well location will likely result in the destruction of migratory bird nests, as well as the abandonment of nests sites adjacent to heavy equipment operations. Based on habitat condition and associated disturbance the number of nests destroyed will likely range from 8 to 16. Direct mortality of adult birds is highly unlikely.

The identified species are common bird species in the area. While the probable loss of nests and perhaps individual birds is not desirable, the affect on the bird population of the area would be negligible.

#### No-Action Alternative

Under the no action alternative, impacts as described above would not occur.

#### **Mitigation Measures**

Operations would not be allowed to commence during the period May 1 to July 15 due to the provisions of the Ely District policy management actions for the conservation of migratory birds. An exception to this policy would be made if a qualified wildlife biologist surveys the project area for nesting migratory birds and determined that the impacts would be .

#### **Invasive, Non-Native Species (Including Noxious Weeds)**

#### **Affected Environment**

Noxious weeds, those specifically listed by the State of Nevada (**Attachment 6**), are defined as undesirable, introduced species for which aggressive control methods may be needed to stop their establishment in a given area. A zero tolerance policy for these weeds is in effect for project disturbances such as this oil well. A noxious and invasive weed risk assessment was completed for this project. **See Attachment 7**. The overall risk for noxious weeds was calculated as moderate based on BLM Manual 9015. No noxious weeds were found on site during pre-drill inspection of February 16, 2007. However, Russian knapweed (*Acroptilon repens*), Spotted knapweed (*Centaurea stoebe*), Tall whitetop (*Lepidium latifolium*), Scotch thistle (*Onorpodum acanthium*), and Salt cedar (*Tamarix spp.*) have been inventoried elsewhere in this portion of White River Valley.

Invasive weeds, particularly cheatgrass and lesser amounts of mustard, halogeton, and Russian thistle occur in varying, generally small amounts, throughout the project area and surrounding region. Unreclaimed areas, such as the previously burned areas northeast of Rio Blanco #2 are susceptible to invasions of massive cheatgrass.

#### **Environmental Consequences**

#### Proposed Action

Disturbed areas are always at a higher risk of being infested with new weed populations. In

order to minimize the risk of spreading noxious and invasive weeds to the project area the standard BLM noxious and invasive weed SOPs should be followed.

Newly disturbed areas almost always will have some of these invasive, non-native species show up with the initial seeding because these weed seeds are already on site in the soil or nearby. Seed mixes are designed to be competitive with these species, and usually, over time, the longer lived perennial natives will out-compete the opportunistic annual weeds.

Noxious weed infestations are not expected. The proposed interim and final reclamation seedings, cleansing of equipment, and using weed free seed would decrease the amount of invasive weeds infesting the reclaimed project area. The prevention, monitoring, and eradication measures incorporated in the proposed action are adequate to mitigate any potential invasive and noxious weed invasion.

#### No Action Alternative

Under the no action alternative, the increased chance of invasive and possible noxious weed infestations would not occur.

#### **Mitigation Measures**

The operator will be responsible for complete control of any noxious weeds that become established within the project area during the life of this project through final reclamation. This would include the responsibility for control of noxious weeds along the access roads, pad location, and any gravel sources. Noxious and invasive weeds, which may be introduced due to soil disturbance and reclamation, will be treated by methods to be approved by the authorized officer. Bond release is contingent upon the absence of noxious weeds.

The operator would be responsible for taking steps to mitigate the spread or increased densities of noxious and invasive weeds that result from implementation of the proposed action. The operator would implement the Ely Field Office Noxious Weed Prevention Schedule and SOPs for weed treatments, with special emphasis on the following actions. Prior to entering the site, all construction, drilling equipment, and vehicles would be washed down and cleaned to prevent the importation of noxious weed seeds from prior places of work. Vehicles would stay on roads and avoid driving through any weed patches. All seeds used in reclamation would be certified weed-free. The operator would assist in monitoring for noxious and invasive weeds during the life of the project, until reclamation is complete.

#### **Visual Resources Management (VRM)**

#### **Affected Environment**

The proposed project is located within a remote, uninhabited, portion of Nye County classified as Visual Resource Management (VRM) Class IV zone. The objective for the Class IV zone is to allow change, even dominant change, but to mitigate the change as well as possible. The well location is about 600 feet west of SR 318.

#### **Environmental Consequences**

#### Proposed Action

The drilling operation would be directly visible from SR318.

Should the well be put into production, production facilities and activities would be highly visible for the life of the well. Use of environmentally friendly colors and placement of facilities would lessen the attraction to the operation by motorists along SR 318. Should native vegetation be successfully re-established, the new plant community would contrast with the existing cheatgrass community for many years.

Night lighting fixtures on the drill rig are vapor proof fluorescent lights which minimize glare and visual impairment to passing motorists.

#### No Action Alternative

Under the no action alternative, impacts as described above would not occur.

#### **Livestock Grazing**

#### **Affected Environment**

The proposed well site is located within the Hardy Spring Grazing Allotment. This use area is grazed seasonally by cattle. The vegetation provides forage for cattle.

#### **Environmental Consequences**

#### Proposed Action

There would be an immediate loss of 4.0 acres of existing vegetation for grazing. It is estimated that less than one AUM of forage would be lost during this time. Should the well be plugged and abandoned, the reclamation measures of the proposed action would, as much as possible, begin restoration of vegetation over the new disturbance within two to three years. Should the well be placed into production, approximately two acres would be unavailable for several additional years.

Should the water well be put in use, approximately one acre will remain permanently unreclaimed. The water well, however, would provide a new source of water for livestock and wildlife.

There are no anticipated conflicts between rangeland resources and the proposed action.

#### No Action Alternative

Under the no action alternative, the loss of vegetation available for grazing, as described above, would not occur.

If the water supply well is converted to agricultural use, an additional water source would be available for livestock.

#### Water Quality (Drinking/Ground)

#### **Affected Environment**

Six springs and one stock pond are located approximately 1 to 2 miles west and south of the proposed Rio Blanco #3 location. No measurements are readily available for these springs. A temporary water well drilled in conjunction with the Rio Blanco #2 oil well, approximately 3 miles to the north, reportedly intercepted water at approximately 120 feet.

Recharge for these sources is assumed to be from the east in the south Egan Range.

#### **Environmental Consequences**

#### Proposed Action

Wildcat oil wells such as Rio Blanco #3 generally require less than 100,000 gallons (0.3 acre feet) of water from the water supply well drilled on the location. This is used for drilling, dust control, and domestic use during period of drilling the oil well. There would be a local, short-term drawdown at the water source on the oil well location, particularly while drilling through lost circulation zones.

Based on Jacob's equation, drawdown was estimated at 0.4 feet at the water supply well and zero at 1,000 feet from the well. Parameters included pumping 2 gallons per minute for 30 days, transmissivity of 10,000 gpd/foot, and storage of 0.15 (transmissivity and storage derived from Groundwater, Freeze and Cherry (1979)). Therefore, it is not expected that the drawdown would affect the springs one to two miles away. The proposed action would not affect any existing drinking water sources within the project area.

The drilling fluids are returned to the reserve pit and recirculated down the hole. Lining of the reserve pit would ensure that fluids would not leak into the ground where they could intermix with and possibly degrade near-surface groundwater. Compliance with Federal and State water regulations, which includes casing the top 500 feet or more of the oil well, would prevent downhole contamination of groundwater in the proposed oil well. The water component of the drilling mud would be allowed to evaporate prior to backfilling and reseeding the reserve pit.

#### No Action Alternative

Under the no action alternative, no impacts would occur.

#### **Special Status Species**

No federally listed, threatened or endangered species, or species proposed for federal listing are known to occur within the project area. No special status plants, including Cryptantha Welshii, or animals were identified during the February 16, 2007 on-site inspection or have been previously identified in the project area.

Two State Protected and BLM Sensitive fish Species occur in springs in the vicinity of the project area. The White River Speckled Dace occurs in Hardy springs approximately 1.5 miles southwest of the proposed project area. The Moorman White River Springfish occurs in the Moorman Springs located approximately 6 miles southwest of the project area.

#### **Environmental Consequences**

#### Proposed Action

Drawdown from the water supply well and the drilling operation is not expected to affect the springs more than one mile from the Rio Blanco #3 location. Therefore, there would be a negligible effect on the sensitive fish species or other special status species.

#### No-Action Alternative

Under the no action alternative, there would be no impact to the special status species.

#### Wastes, Hazardous and Solid

#### **Affected Environment**

No solid or liquid hazardous wastes presently occur on site.

During drilling operations, non-hazardous additives would be mixed with the drilling fluid in order to control the pH, viscosity, and density of the fluid. The drilling fluid, itself, consists of mostly water, bentonite, lost circulation materials such as paper and wood products, and the fine fraction of the drill cuttings. It is not toxic, either as a fluid or when dried. The fluids are recycled through the reserve pit where the cuttings settle out and the fluids pumped back down the hole. Petroleum products in the form of fuels and lubricants would be temporarily stored and used on site.

#### **Environmental Consequences**

#### Proposed Action

The drill fluid would be contained within the lined reserve pit. Any hydrocarbons would be removed from the fluid, stored separately, and removed off site. Upon completion of drilling, the reserve pit is allowed to dry, then covered with stockpiled fill and topsoil, and seeded. Unused additives would be hauled off site during rig demobilization.

Petroleum products are also used. Hydrocarbon spills would be cleaned-up according to

protocols regulated by the Nevada Division of Environmental Protection (NRS 445A).

No other hazardous wastes would be generated. Solid wastes would be disposed of properly in accordance with the standard Conditions of Approval.

The precautions and mitigating measures in the proposed action are adequate to prevent impacts from wastes, hazardous and solid.

#### No Action Alternative

Under the no action alternative, impacts as described above would not occur.

#### **Air Quality**

#### **Affected Environment**

Periodic degradation of air quality occurs due to winds blowing dust from nearby areas and occasional regional air pollution.

#### **Environmental Consequences**

#### **Proposed Action**

There would be a localized, increase of dust levels as a result of construction activities and vehicle use. The gravel applied to the location pad and access road will help cover the exposed loose soils. Even so, wind blown dust from these exposed areas could cause a temporary degradation in air quality. Nevada State Air Quality standards would apply to this operation, and the operator would be required to apply water for dust abatement if the problem was above a threshold level as stated in the standards. Following reclamation of the site and successful revegetation, the local air quality would return to pre-operation conditions. Should the well be placed in production, dust would be generated by periodic vehicle traffic for several years.

#### No Action Alternative

Under the no action alternative, there would be no change to air quality.

#### IV. CUMULATIVE IMPACTS

Cumulative impacts are discussed in the <u>Egan Resource Management Plan (RMP) Proposed Oil</u> and Gas Leasing Amendment and Final Environmental Impact Statement, August 1993, pp. 4-31 through 4-43. Typical oil and gas activities, including exploration, wildcat drilling, production and field development, and abandonment, are described in Appendix A of that document and are incorporated by reference into this environmental analysis. No additional analysis is necessary to address cumulative impacts for the proposed action.

The reasonable development scenario for the Egan Resource Area assumed that 175 wells would

be drilled during the life of the plan and that only 10% of these would be producers. Approximately 32 wells have been drilled in the area analyzed in the Egan RMP since 1993. One has been put into production.

Resources that were identified in the leasing amendment as potentially being affected in a cumulative sense consist of wildlife habitat, woodland products, cultural resources, recreational and visual resources, livestock and vegetation, wild horses and burros, soils and air quality. There would be little impact to these resources from the proposed action.

#### V. PROPOSED MITIGATING MEASURES

Along with the mitigating measures discussed in Chapter III, the preventative measures and procedures of the proposed action and the attached Conditions of Approval from the RMP (**Attachment 2**) are adequate to mitigate adverse effects to the human environment

#### VI. SUGGESTED MONITORING

The monitoring measures included in the proposed action are sufficient to ensure mitigation of the potential impacts described above. No additional monitoring measures are proposed as a result of the impact analysis.

#### VII. CONSULTATION AND COORDINATION

#### **Intensity of Public Interest and Record of Contacts**

There is general public interest in this type of potential development. The proposed action was discussed at the BLM's regular Tribal Coordination meeting on January 17, 2007. The Application for Permit to Drill (APD) was posted at the Nevada BLM State Office on receipt. Notification of the availability of the Notice of Staking was posted on the Ely Field Office website (http://www.nv.blm.gov/ely/nepa/ea\_list.htm) on April 12, 2007. Letters requesting comments for inclusion in the EA were mailed to the Western Watersheds Project and the Nye County Commission on April 10 2007.

#### **Record of Internal District Review**

Bonnie Waggoner Invasive, Non-Native Species

Nathan Thomas Cultural Resources

Steve Leslie Visual Resource/Wilderness/Recreation

Steve Abel Wildlife, Migratory Birds, Special Status Plants,

Steve Abel Special Status Animals

Elvis Wall Native American Consultation
Kari Harrison Air and water quality, Floodplains,

Kari Harrison Riparian/Wetlands

Chris Mayer Range

Bill Wilson Sheri Wysong Minerals Environmental Coordinator

## **Attachment 1. Application for Permit to Drill**

The APD is available at the following locations

Bureau of Land Management Ely Field Office 702 North Industrial Way Ely, Nevada 89301

Bureau of Land Management Nevada State Office 1340 Financial Boulevard Reno, Nevada 89520

# Attachment 2. Standard Conditions of Approval for Oil and Gas Operations in the Egan Resource Area

#### Application for Permit to Drill (APD) and Sundry Notices

The regulations governing drilling operations on public lands are stated in 43 CFR 3260. With submittal of an APD or Sundry Notice by the operator or lessee, the following conditions of approval will be required for the operation as applicable.

#### **Pre-Construction**

- 1. Existing roads should be used to the extent possible. Additional roads, if needed, shall be kept to an absolute minimum and the location of routes must be approved by the AO prior to construction.
- 2. Upon determination of an impending field development, a transportation plan will be requested to reduce unnecessary access roads.
- 3. All access roads will be constructed and maintained to BLM road standards (BLM Manual Section 9113).
- 4. Off-road travel will be restricted to terrain with less than 30 percent slopes unless approved by the AO.
- 5. Proposed surface disturbance and vehicular travel will be limited to the approved well location and access route.
- 6. Any changes in well location, facility location, access, or site expansion must be approved by the AO in advance.
- 7. Prior to approval of an APD or other lease operations, a Section 106 consultation must be completed by the AO as provided for under the Nevada BLM Programmatic Agreement for Cultural Resources.
- 8. Any activity planned within a ¼-mile on either side the Pony Express National Historic Trail must undergo a visual assessment. Appropriate mitigation of visual impacts will be implemented as necessary to keep the management corridor in as natural a condition as possible.

#### **Well Pad and Facility Construction**

- 1. Every pad, access road, or facility site must have an approved surface drainage plan.
- 2. A site diagram depicting the location of production facilities, recontoured slopes and stabilization measures shall be approved by the AO prior to installation of production

facilities.

- 3. Drainage from disturbed areas will be confined or directed so that erosion of undisturbed areas is not increased. In addition, no runoff water (including that from roads) will be allowed to flow into intermittent or perennial waterways without first passing through a sediment-trapping mechanism. Erosion control structures may include: water bars, berms, drainage ditches, sediment ponds, or devices.
- 4. Access road construction for exploratory wells should be planned such that a permanent road can later be constructed in the event of field development.
- 5. Construction of access roads on steep hillsides and near watercourses will be avoided where alternate routes provide adequate access.
- 6. Access roads requiring construction with cut and fill will be designed to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material will be deposited, resource concerns, and visual contrast.
- 7. Fill material will not be cast over hilltops or into drainages. Cut slopes should normally be no steeper than 3:1 and fill slopes no steeper than 2:1.
- 8. Low water crossings should be used whenever possible. Installation of culverts, if necessary, will be designed to maintain the original stream gradient and will be of adequate size to accommodate a 24-hour 100-year event. Fill material will be properly compacted in layers not exceeding 6 inches in thickness to insure stability and to prevent washing out or dislocation of the culvert. The road surface should not be less than 12 inches above the culvert to prevent crushing from weight loads.
- 9. As required, fill slopes surrounding culverts will be riprapped with a well-graded mixture of rock sizes containing no material greater than two feet or smaller than three inches. The ratio of maximum to minimum dimension of any rock shall not exceed 6:1.
- 10. Water turnouts needed to provide additional drainage will be constructed not to exceed two percent slope to minimize soil erosion.
- 11. Well site layout should take into account the character of the topography and landform. Deep vertical cuts and steep long fill slopes should be avoided. All cut and fill slopes should be constructed to the least percent slope practical.
- 12. Trash will be retained in portable trash cages and hauled to an authorized disposal site for disposal. Burning will not be allowed on the well site.
- 13. No drilling or storage facilities will be allowed within 500 feet of any pond, reservoir, canal, spring, or stream. Other protective areas near water may be required to protect riparian habitat and special status species.
- 14. Spring and water developments on public lands may be used only with the prior written

- approval of the AO or the water rights holder.
- 15. To maintain aesthetic values, all semi-permanent and permanent facilities will be painted to blend with the natural surroundings. The Standard Environmental Colors will be used for color selection. Fences shall be made of non-reflective materials.
- 16. Fences shall not be cut without prior approval of the AO. Before cutting any fences, the operator shall firmly brace the fence on both sides of the cut; a temporary gate will be installed for use during the course of operations unless the fence is immediately repaired. Upon completion of operations, fences shall be restored to at least their original condition.
- 17. As directed by the AO, cattle guards will be installed whenever access roads are through pasture gates or fences. These cattle guards shall be maintained. This includes cleaning out under cattle guard bases when needed.
- 18. The depth of surface soil material to be removed and stockpiled will be specified by the AO. If topsoil is stockpiled for more than one year, the stockpile shall be seeded or otherwise protected from wind and water erosion. The stockpile shall be marked or segregated to avoid loss or mixing with other subsurface materials. Any trees removed will be separated from soils and stockpiled separately.
- 19. Mud, separation pits, and other containments used during the exploration or operation of the lease for the storage of any hazardous materials shall be adequately fenced, posted, and/or covered.
- 20. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to whether:
  - a. the materials appear eligible for the National Register of Historic Places
  - b. the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
  - c. a timeframe for the authorized officer to complete an expedited review under 36 CFR 800.11 or other applicable Programmatic Agreement, to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate
- 21. If the operator wishes, at any time, relocate activities to avoid the expense of mitigation and/or the delays associated with the process described in item 20 above for inadvertent discovery of cultural resources, the authorized officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The authorized officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the authorized officer that the required mitigation has been completed, the operator will then be allowed to resume construction.

- 22. Bald eagle roosts, peregrine falcon hack sites and known occupied raptor aeries (nests) will be avoided during the nesting and fledging period.
- 23. Field development construction activities within ½-mile of a sage grouse lek will require motorized equipment to have noise abatement devices to preclude excessive noise during the sage grouse strutting period.
- 24. The cutting of rare, unique or unusual trees will not be permitted. In particular cutting of Bristlecone pine, Swamp Cedar, Ponderosa pine, and White Fir will be avoided.
- 25. Consultation with the U.S. Fish and Wildlife Service (FWS) is required per section 7 of the Endangered Species Act prior to approval of an APD or other lease operations if any proposed listed or listed threatened or endangered species or its critical habitat is likely to be affected by project activities. If there is deemed to be any adverse impact, the proposal will be modified or the request denied.
- 26. Actions that will adversely impact a special status species will be modified.
- 27. Fences shall be flagged with bright colored flagging at least every rod for visibility to wild horses. All fences should be constructed using green steel posts with white or silver tops to increase visibility. Fences should also avoid obvious horse migration routes (deep trails, stud piles) if at all possible.
- 28. No access roads, drill pads, mud pits or storage facilities will be allowed within 200 meters of cave entrances, drainage areas and subsurface passages. No waste material or chemicals will be placed, or disposed of, in sinkholes or gates during specified time frames by cave entrances. If during construction activities any sinkholes or cave openings are discovered, construction activities will cease and the AO will be notified.
- 29. The discharge of dredged or fill material into surface waters such as navigable and interstate waters and their tributaries, wetlands adjacent to those waters and all impoundments of those waters may require an individual permit or notification under Section 404 of the Clean Water Act (CWA) issued by the District Engineer (DE) of the Corps of Engineers (COE). Criteria applied under Section 404 is established in regulation and will be used to determine the type of permit or notification required.

#### **Field Operation**

- 1. Operations shall be done in a manner that prevents damage, interference, or disruption of water flows, and improvements associated with all springs, wells, or impoundments. It is the operator's responsibility to enact the precautions necessary to prevent damage, interference, or disruptions.
- 2. Companies controlling roads that provide access into crucial wildlife areas may be required to close the road with a lockable gate to prevent general use of the road during critical periods of the year when resource problems are experienced (during hunting seasons, winter, etc.). This restrictive measure will be applied where needed to protect wildlife resources or

- to minimize environmental degradation.
- 3. The use of closed road segments will be restricted to legitimate, authorized agents of the lessee and/or their subcontractor(s), the land managing agency, and other agencies with a legitimate need (NDOW, other law enforcement agencies, etc.).
- 4. Unauthorized use or failure to lock gates during specified time frames by the lessee or its subcontractors will be considered a violation of the terms of the APD or associated grants.
- 5. The operator shall regularly maintain all roads used for access to the lease operation. A maintenance plan may be required. A regular maintenance program may include, but not be limited to, upgrading of existing roads, blading, ditching, culvert and drainage installation, and graveling or capping of roadbed.
- 6. Noxious weeds that may be introduced due to soil disturbance and reclamation will be treated by methods to be approved by the AO. These methods may include biological, mechanical, or chemical. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the AO 60 days prior to the planned application date.

#### **Reclamation and Abandonment**

- 1. A water well may be accepted by the Ely District upon completion of operations. Please submit the following information to the Ely District Office, Bureau of Land Management, HC 33, Box 33500, Ely, NV 89301-9408:
  - a. Profile 1 Water Analysis
  - b. Type of inside diameter of casing used in well
  - c. Total depth of well
  - d. Depth of concrete seal
  - e. Depth of static water level
  - f. Water bearing formation or description of aquifer
- 2. The operator or contractor will contact the AO 48 hours prior to reclamation work.
- 3. Restoration work may not begin on the well site until the reserve pits are completely dry.
- 4. Disturbed areas will be recontoured to blend as nearly as possible with the natural topography prior to revegetation. This includes removing all berms and refilling all cuts. Compacted portions of the pad will be ripped to a depth of 12 inches unless in solid rock.
- 5. Site preparation for reclamation may include contour furrowing, terracing, reduction of steep cut and fill slopes, and the installation of water bars, etc.

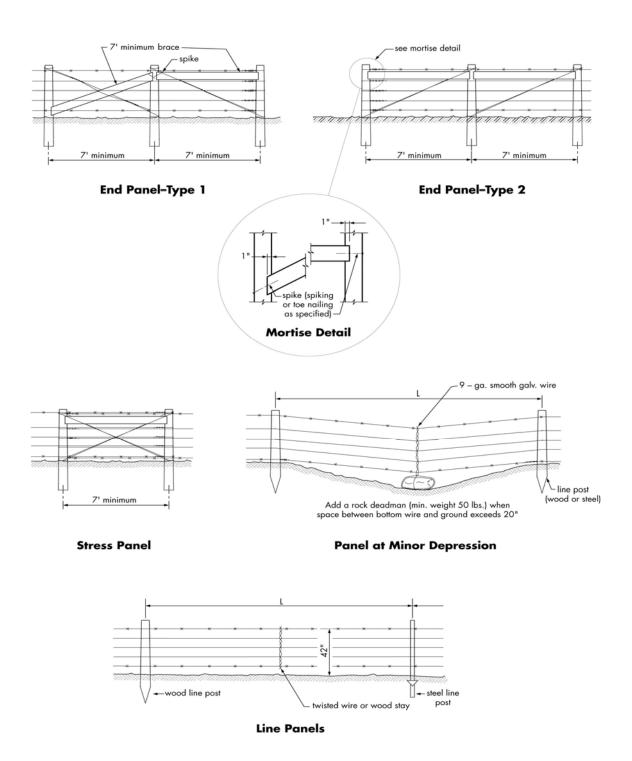
- 6. All portions of the access roads not needed for other uses as determined by the AO will be reclaimed.
- 7. The stockpiled topsoil will be spread evenly over the disturbed area.
- 8. The operator will be required to construct water bars and re-open drainages on abandoned access roads and pipeline routes to minimize erosion as required. Water bars will be spaced appropriately dependent upon topography and slope. Pipeline routes shall be water-barred perpendicular to the fall-line of the slope.
- 9. The area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion stabilized and an acceptable vegetative cover has been established. The Nevada Guidelines for Successful Revegetation for the Nevada Division of Environmental Protection, the Bureau of Land Management and the U.S.D.A Forest Service (attached as part of the SPPs/COAs) will be used to determine if revegetation is successful.
- 10. Rehabilitation shall be planned on the sites of both producing and abandoned wells. The entire site or portion thereof, not required for the continued operation of the well, should be restored as nearly as practical to its original condition. Final grading of back-filled and cut slopes will be done to prevent erosion and encourage establishment of vegetation.
- 11. Petroleum products such as gasoline, diesel fuel, helicopter fuel, crankcase oil, lubricants, and cleaning solvents used to fuel, lubricate, and clean vehicles and equipment will be containerized in approved containers.
- 12. Hazardous material shall be properly stored in separate containers to prevent mixing, drainage, or accidents. Hazardous materials shall not be drained onto the ground or into streams or drainage areas.
- 13. Totally enclosed containment shall be provided for all solid construction waste including trash, garbage, petroleum products, and related litter will be removed to an authorized sanitary landfill approved for the disposal of these classes of waste.
- 14. All construction, operation, and maintenance activities shall comply with all applicable Federal, State, and local laws and regulations regarding the use of hazardous substances and the protection of air and water quality.
- 15. In construction areas where recontouring is not required, vegetation will be left in place wherever possible and the original contour will be maintained to avoid excessive root damage and allow for resprouting.
- 16. Watering facilities (e.g. tanks, developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction activities to its predisturbed condition as required by the AO.
- 17. Mulching of the seed-bed following seeding may be required under certain conditions (i.e. –

expected severe erosion), as determined by the AO.

18. Seed will be broadcast between October 1 and March 15 using a site-specific seed mixture and depth of planting as determined by the AO. Seed may be applied with a rangeland drill at half the rate of broadcast seeding. All seeding application rates will be in pounds of pure live seed per acre. Seed should be adapted varieties.

Attachment 3.

Recommended construction standards for exclosure fences in livestock areas.



# Attachment 4 Interim Reclamation Seed Mix for Rio Blanco No. 3

Species	Seeds/Lb	Seed rate* lbs/ac	Seeds/sq ft
Sporobolus airoides (Alkali sacatan )	1,758,000	0.4	16
Psathyrostachys juncea (Russian Wildrye, variety) Borzoisky Select:	175,000	5	20
Penstemon palmeri (Palmer penstemon)	610,000	1.0	14
Agropyron cristatum x desertorum (Hycrest Crested Wheatgrass)	225,000	2.0	10
Total		8.4 lbs/ac	60 seeds/sq ft.

Seeds should be planted between October 1 and March 15. Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

Pure Live Seed pounds/acre = Seed rate (listed above lbs/acre)
(% germination) (% purity)

<sup>\*</sup> Seed rate - Adjust listed pounds/acre for pure live seed.

Attachment 5 Final Reclamation Seed List for Rio Blanco No. 3

Species	Seeds/Lb	Seed rate* lbs/ac	Seeds/sq ft
Agropyron cristatum x desertorum		100, 40	
(Hycrest Crested Wheatgrass)	225,000	2.0	10
Psathyrostachys juncea (Russian Wildrye, variety -Bozo	175,000 bisky Select)	2.0	8
Oryzopsis hymenoides (Indian ricegrass)	141,000	2.0	6
Sitanion hystrix (Squirrel tail)	192,000	2.0	9
Bouteloua aristoides (Needle gramma)	825,000	0.5	9
Poa sandbergii (Sandberg's bluegrass)	925,000	0.5	10
Linum lewisii (Appar Blue Flax)	293,000	0.25	1
Penstemon palmeri (Palmer penstemon)	610,000	0.25	3
Atriplex canescens (Four wing saltbrush)	52,000	1.0	1.0
Atriplex confertifolia (Shadscale)	64,900	1.0	1.0
Total		11.5 lbs/ac	58 seeds/sq ft.

Seeds should be planted between October 1 and March 15. Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

Pure Live Seed pounds/acre = Seed rate (listed above lbs/acre)
(% germination) (% purity)

<sup>\*</sup> Seed rate - Adjust listed pounds/acre for pure live seed.

# Attachment 6 Nevada Noxious Weed List

NEVADA NOXIOUS WEED LIST			
Common Name	Latin Name	Other Name(s)	
Austrian fieldcress	Rorippa austriaca	Swaisonpea	
Austrian peaweed	Sphaerophysa salsula		
Black henbane	Hyoscyamus niger		
Camelthorn	Alhagi pseudalhagi	A. camelorum	
Canada thistle	Cirsium arvense		
Carolina Horsenettle	Solanum carolinense		
Common crupina	Crupina vulgaris		
Common St. Johnswort	Hypercium perforatum	Goatweed; Klamath weed	
Dalmation toadflax	Linaria genistifolia ssp. dalmatica		
Diffuse knapweed	Centaurea diffusa		
Dyer's woad	Isatis tinctoria		
Hoary cress	Cardaria draba	whitetop	
Houndstongue	Cynoglossum officinale		
Iberian starthistle	Centaurea iberica		
Johnsongrass	Sorghum halepense	Perennial sorghum	
Leafy spurge	Euphorbia esula		
Mediterranean sage	Salvia aethiopis		
Medusahead	Taeniatherum caput-medusae	Medusahead rye	
Musk thistle	Carduus nutans		
Perennial pepperweed	Lepidium latifolium	Tall whitetop	
Perennial sowthistle	Sonchus arvensis		
Poison Hemlock	Conium maculatum		

NEVADA NOXIOUS WEED LIST				
Common Name Latin Name Other Name(s)				
Puncturevine	Tribulus terrestris			
Purple loosestrife	Lythrum salicaria	Purple lythrum		
Purple starthistle	Centaurea calcitrapa			
Rush skeletonweed	Chondrilla juncea			
Russian knapweed	Centaurea repens			
Saltcedar	Tamarix ramosissima	Tamarisk		
Scotch thistle	Onapordum acanthium			
Silverleaf nightshade	Solanum elaeagnifolium	White horsenettle		
Spotted knapweed	Centaurea maculosa			
Squarrose knapweed	Centaurea virgata ssp. squarrosa			
Sulfur cinquefoil	Potentilla recta			
Yellow starthistle	Centaurea solstitialis			
Yellow toadflax	Linaria vulgaris	butter and eggs		
Waterhemlock	Cicuta ssp.			
Western waterhemlock	Cicuta douglasii			
Wild licorice	Glycyrrhiza lepidota	American licorice		

#### Attachment 7

# RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

# Eagle Exploration, Inc - Rio Blanco No. 3 Nye County, Nevada

On April 12<sup>th</sup>, 2007 a Noxious & Invasive Weed Risk Assessment was completed for the Rio Blanco No. 3 Project in Nye County, NV. A site visit was conducted on February 16<sup>th</sup>, 2007 however field weed surveys were not completed instead the Ely District weed inventory data was consulted.

Eagle Exploration, Inc. proposes to drill a wildcat oil and gas well in T. 09 N., R. 62 E., section 18, approximately 15 miles south of Lund. Drilling operations would commence in the spring of 2007, depending on weather and rig availability, and are expected to be completed within approximately one month. If the hole is unsuccessful, it would be immediately plugged and abandoned. Reclamation would be completed in approximately three years. Approximately 300 feet of new road as much as 25 feet wide would be constructed southward to the well location. The new road would be flat bladed and surfaced with approximately 4 inches of gravel. The top 12 inches of topsoil would be salvaged in a windrow along the edge of the road and immediately seeded with the same interim seed mixture as used for the well pad as shown in Attachment 4.

While there are no known noxious weeds within the proposed project area, there are five species found along roads in the area:

Acroptilon repensRussian knapweedCentaurea stoebeSpotted knapweedLepidium latifoliumTall whitetopOnorpodum acanthiumScotch thistleTamarix spp.Salt cedar

There is also cheatgrass (*Bromus tectorum*), halogeten (*Halogeten glomeratus*), and Russian thistle (*Salsola kali*) scattered through out the area.

Factor 1 – The likelihood of noxious/invasive weed species spreading to the project area

None (0)	Noxious and invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
Low (1-3)	Noxious and invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious weeds into the project area.
Moderate (4-7)	Noxious and invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious weeds within the project area.
High (7-10)	Heavy infestations of noxious and invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and

spread of noxious weeds on disturbed sites throughout much of the project area.
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The project site rates as Moderate (4) at the present time. While there are no noxious weeds within the proposed project area the high amount of ground disturbance could allow new infestations to establish.

Factor 2 - The consequences of noxious/invasive weed establishment in the project area

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (7-10)	Obvious adverse effects within the project area and probable expansion of noxious and invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

The project site rates as Moderate (4) at the present time based on the fact that the project area is currently free of any noxious weed species. Also, an increase in cheatgrass could alter the fire regime in the area.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.

The Risk Rating for the proposed action rates as Moderate (16) at the present time. The standard BLM noxious and invasive weed SOPs should be followed to minimize impacts.

Reviewed by:		
	Bonnie Waggoner	 Date
	Noxious and Invasive Weed Coordinator	